



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,992	09/29/2000	Walter W. Lee	5122	1738

7590 07/15/2005  
Glenn Patent Group  
Suite L  
3475 Edison Way  
Menlo Park, CA 94025

EXAMINER
----------

NAJARIAN, LENA

ART UNIT	PAPER NUMBER
----------	--------------

3626

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/675,992

Applicant(s)

LEE ET AL.

Examiner

Lena Najarian

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-18, 26-35, 38 and 39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-25, 36 and 37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 20020312.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group II (claims 19-25 and 36-37) in the reply filed on 6/20/05 is acknowledged.
2. Claims 1-18, 26-35, and 38-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/20/05.

### ***Oath/Declaration***

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:  
It was not executed in accordance with either 37 CFR 1.66 or 1.68.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3626

5. Claims 19, 21-25, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boston et al. (4,812,628) in view of French et al. (US 6,282,658 B2).

(A) Referring to claim 19, Boston discloses a computer-implemented method for processing a request for a transaction over a client-server network, the method comprising (col. 1, lines 10-18 and col. 1, line 67 – col. 2, line 6 of Boston):

receiving a request for a transaction from a customer through a client computer, the request including a first set of transaction data for variables descriptive of the initial transaction (col. 5, lines 60-66 of Boston; the Examiner interprets “cardholder” to be a form of “customer”);

determining a transaction score based on the first set of transaction data and indicative of a level of risk associated with the transaction (col. 5, line 66 – col. 6, line 4 and col. 6, lines 57-68 of Boston; the Examiner interprets “risk assessment value” to be a form of “transaction score”); and

responsive to the transaction score, performing at least one of:

terminating the transaction (col. 6, lines 1-4 of Boston); or

proceeding with the request for a transaction (col. 6, lines 1-4 of Boston).

Boston does not disclose responsive to the transaction score, obtaining additional data from the customer.

French discloses obtaining additional data from the customer (col. 13, lines 31-38 of French).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of French within Boston. The motivation

Art Unit: 3626

for doing so would have been to ensure the identity of the user and prevent fraud (see abstract of French).

(B) Referring to claim 21, Boston discloses responsive to the transaction score, performing at least one of:

terminating the transaction (col. 6, lines 1-4 of Boston); or  
proceeding with the request for a transaction (col. 6, lines 1-4 of Boston); and  
terminating the transaction if the transaction score is above an upper bound;  
proceeding with the transaction if the transaction score is below a lower bound (col. 3, line 66 - col. 4, line 17 of Boston).

Boston does not disclose obtaining additional data from the customer and obtaining additional data if the transaction score is between the lower bound and upper bound inclusive.

French discloses obtaining additional data from the customer and obtaining additional data if the transaction score is between the lower bound and upper bound inclusive (col. 13, lines 31-38 and col. 14, lines 32-43 of French).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of French within Boston. The motivation for doing so would have been to determine whether additional information is needed in the authentication process (col. 14, lines 37-43 of French).

(C) Referring to claim 22, Boston discloses wherein at least one of the upper bound and the lower bound is a function of the value of the transaction (col. 3, line 66 – col. 4, line 17 of Boston).

Art Unit: 3626

(D) Referring to claim 23, Boston does not disclose wherein receiving a request for a transaction comprises:

generating and forwarding to the customer's client computer a form for obtaining the first set of transaction data.

French discloses wherein receiving a request for a transaction comprises:

generating and forwarding to the customer's client computer a form for obtaining the first set of transaction data (col. 6, lines 14-24 and 35-40 of French).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of French within Boston. The motivation for doing so would have been to prompt the user to supply information (col. 6, lines 17-19 of French).

(E) Referring to claim 24, Boston does not disclose wherein obtaining additional data from the customer comprises:

generating and forwarding a request for additional data to the customer's client computer.

French discloses generating and forwarding a request for additional data to the customer's client computer (col. 13, lines 31-38, Fig. 34, and col. 3, lines 46-50 of French).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of French within Boston. The motivation for doing so would have been prompt the user to supply information (col. 6, lines 17-19 of French).

Art Unit: 3626

(F) Referring to claim 25, Boston does not disclose wherein generating and forwarding to the customer's client computer a request for additional data comprises generating and forwarding to the customer's client computer a form for obtaining additional data.

French discloses wherein generating and forwarding to the customer's client computer a request for additional data comprises generating and forwarding to the customer's client computer a form for obtaining additional data (Fig. 34 and col. 3, lines 46-50 of French).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of French within Boston. The motivation for doing so would have been prompt the user to supply information (col. 6, lines 17-19 of French).

(G) Referring to claim 36, Boston discloses a system for processing a request for a transaction over a computer network, the network comprising (col. 1, lines 10-18 and col. 1, line 67 – col. 2, line 6 of Boston):

a transaction-scoring module adapted for receiving transaction data and for providing a transaction score (col. 5, line 60 – col. 6, line 4 and col. 6, lines 57-68 of Boston; the Examiner interprets "risk assessment value" to be a form of "transaction score"); and

a thresholding module adapted for receiving the transaction score and, based on the transaction score, applying the score to the at least one threshold to selectively perform at least one of (col. 3, line 66 – col. 4, line 17 of Boston):

completing the transaction (col. 6, lines 1-4 of Boston); or

Art Unit: 3626

terminating the transaction (col. 6, lines 1-4 of Boston).

Boston does not disclose selectively performing obtaining additional information.

French discloses obtaining additional information (col. 13, lines 31-38 of French).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the feature of French within Boston. The motivation for doing so would have been to ensure the identity of the user and prevent fraud (see abstract of French).

6. Claims 20 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boston et al. (4,812,628) in view of French et al. (US 6,282,658 B2), and further in view of Jobber et al. ("The Prediction of Industrial Mail-survey Response Rates").

(A) Referring to claim 20, Boston does not disclose wherein obtaining additional data comprises:

determining, for each of a plurality of follow-up question sets, a probability of non-attributed fulfillment after presentment of the follow-up question set based on a metric for the value of additional data and based on a likelihood of interaction termination; and

selecting the follow-up question set with the greatest probability of non-attributed fulfillment.

French discloses obtaining additional data (col. 13, lines 31-38 of French).

Jobber et al. disclose determining, for each of a plurality of follow-up question sets, a response rate after presentment of the follow-up question set based on a metric for the value of additional data and based on a likelihood of non-responsiveness; and



selecting the follow-up question set with the greatest probability of non-attributed fulfillment (page 839 of Jobber et al.).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Jobber within French and Boston. The motivation for doing so would have been to tailor the design of the questions in order to minimize non-response (page 839 of Jobber et al.).

(B) Referring to claim 37, Boston and French do not disclose wherein the system further comprises an information value prediction model adapted for receiving data representing a plurality of follow-up question sets and for determining, for each of the plurality of follow-up question sets, a metric for the value of additional information provided by the follow-up question set;

a friction model adapted for receiving data representing the plurality of follow-up question sets and for determining, for each of the plurality of follow-up question sets, the likelihood that a user will terminate a transaction if presented with the follow-up question set; and

a question set optimization module (a) for determining, for each of the plurality of follow-up question sets, the probability of non-attributed fulfillment based on the metric for the value of additional information provided by the follow-up question set and based on the likelihood that a user will terminate the transaction if the user is presented with the follow-up question set, and (b) for selecting the follow-up question set with the highest probability of non-attributed fulfillment.

Jobber et al. disclose wherein the system further comprises an information value prediction model adapted for receiving data representing a plurality of follow-up question sets and for determining, for each of the plurality of follow-up question sets, a metric for the value of additional information provided by the follow-up question set (see para. 4, page 839 and para. 1, page 840 of Jobber et al.; the Examiner interprets "multiple regression analysis" to be a form of "prediction model");

a friction model adapted for receiving data representing the plurality of follow-up question sets and for determining, for each of the plurality of follow-up question sets, the likelihood that a user will terminate a transaction if presented with the follow-up question set (see para. 4, page 839 and para. 1, page 840 of Jobber et al.); and

a question set optimization module (a) for determining, for each of the plurality of follow-up question sets, the probability of non-attrited fulfillment based on the metric for the value of additional information provided by the follow-up question set and based on the likelihood that a user will terminate the transaction if the user is presented with the follow-up question set, and (b) for selecting the follow-up question set with the highest probability of non-attrited fulfillment (see pages 839-840 of Jobber et al.).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the features of Jobber et al. within Boston and French. The motivation for doing so would have been to tailor the design of the questions in order to minimize non-response (page 839 of Jobber et al).

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited not applied prior art teaches a personal identification system for use with fingerprint data in secured transactions (5,648,648); a transaction system with on/off line risk assessment (5,679,940); an online purchasing method (US 2002/0087467 A1); a system and method for a risk-based purchase of goods (5,732,400); a method and system for detecting fraud in a credit card transaction over the Internet (6,029,154); a method and apparatus for electronic commerce (5,903,878); a method and system for selective incentive point-of-sale marketing in response to customer shopping histories (5,642,485); and a credit verification system (5,231,570).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lena Najarian whose telephone number is 571-272-7072. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Ln*  
In  
7-8-05

  
JOSEPH THOMAS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600